# OWNER'S MANUAL



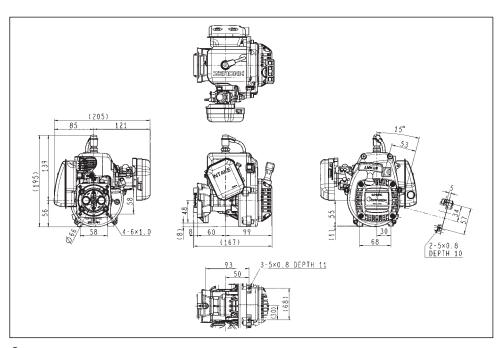
Model: G240RC/G270RC

Model code: X374323111 (G240RC) Model code: X374326111 (G270RC)

#### Thank you for using ZENOAH ENGINE.

- Please read this Owner's Manual thoroughly before operating and use the engine correctly according to this Owner's Manual.
   (For safety reasons, please contact your sales dealer before operating this engine if there is something that you do not understand.)
- This engine has been designed for the use of radio control car.
   Please use this engine in conjunction with the manual for radio control car or radio control equipment you are going to use.
- Any modification of the engine or any use of other applications is prohibited.
- The purchaser (user) shall bear all obligations and responsibilities stipulated by law, local ordinance and the likes.

Husqvarna Zenoah Co., Ltd. shall bear no responsibility whatsoever.



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# **SPECIFICATIONS**

| Engine Type              | G240RC                            | G270RC              |  |  |
|--------------------------|-----------------------------------|---------------------|--|--|
| Overall Size (L x W x H) | 166 x 205 x 196mm                 |                     |  |  |
| Weight                   | 2.07kg                            |                     |  |  |
| Displacement             | 22.5cm <sup>3</sup>               | 25.4cm <sup>3</sup> |  |  |
| Clutch Engagement        | 6000rpm (STD Spring)              |                     |  |  |
| Carburetor Type          | WT-813A                           |                     |  |  |
| Spark Plug               | NGK (                             | CMR7H               |  |  |
| Spark Plug Gap           | 0.65mm                            |                     |  |  |
| Rotating Direction       | Counter-Clockwise (View From PTO) |                     |  |  |

# ▲ SAFETY PRECAUTIONS ▲

- These safety precautions are to prevent you and those people in the vicinity from incurring harm or damage. Make sure to observe these precautions and constantly strive to ensure safety.
- Safe use of the engine is your personal obligation and responsibility.
   Constantly take care to act with good judgment as you enjoy your hobbies.
- The fuel is toxic. Do not let it get into your eyes or mouth. Store it in a cool place, out of the reach of infants and children.
- Use of open flames around the fuel is strictly prohibited, because of danger of fire.
- To prevent burns, make sure not to touch the engine while it is operating or immediately after it has stopped.
- Do not run the motor in poorly ventilated places. Do not breathe the exhaust, as it is a health hazard.
- Please wear clothing that facilitates your safety. Remove all scarves,



- overly long sleeves, neckties and the like. Failure to do so could result in injury.
- When mounting the engine to a model, make sure to follow the model's operating manual. If necessary, reinforce the engine mounting unit and the peripheral parts.

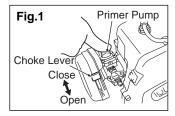
#### **FUEL**

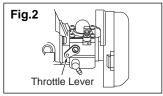
- Mix gasoline (octane over 95) and high grade 2 cycle engine oil (mixing use type; F3C grade or ISO EGC grade) at mixing ratio 25~40:1.
- The mixing ratio is according to the oil recommendation.

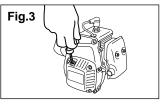
#### [NOTE]

- 1) Never use any alcohol fuel or alcohol added fuel, or the rubber parts in the carburetor and engine will be damaged.
- 2) Gasoline is very flammable. Avoid smoking and any fires near fuel.
- 3) To prevent all possible problems on fueling system, make sure to use the fuel filter which has more than 300 mesh or equivalent and gasoline proof rubber pipe or equivalent.
  - Incorrect fuel filter may cause engine trouble like fuel passage stuffing in carburetor, or piston surface scratching etc.

#### **ENGINE STARTING**







- Push the primer pump several times until overflown fuel flows out. (Fig.1)
- Close the choke lever, and move the throttle lever 1/4~1/3 open position. (Fig.1)(Fig.2)
- Pull the starter(knob) quickly until first firing noise.
   (Fig.3)
- Open the choke(Fig.2), throttle idle~1/4 open
- · Pull the starter quickly
- Operate engine for a few minutes for the warming up.

# IMPORTANT

- In case of engine warm condition, choking may not be necessary.
- Over choking may cause starting difficulty due to wet spark plug.

In this case change spark plug or dry it, and remove fuel rest in the cylinder by pulling starter.

#### **OPERATION**

- This engine is already tuned up to get high power and high speed, and needs correct maintenance to keep such high performance.
- The details for operation may be described in the separate owners manual to be issued by car manufacturer.
- Be sure to have the engine cool down for 30 seconds at idle speed after full throttle running.

# 1) MAINTENANCE CHART

| Items                    | Action          | Before<br>Use | Every<br>25 hours | Every<br>100 hours | Note                 |
|--------------------------|-----------------|---------------|-------------------|--------------------|----------------------|
| Leakage,<br>Damage/Crack | Check           | ~             |                   |                    |                      |
| Idling Speed             | Check/Adjust    | ~             | ~                 | ~                  |                      |
| Air-cleaner              | Check/Cleaning  | ~             | ~                 |                    | Replace if necessary |
| Spark Plug(gap)          | Check/Adjust    |               | ~                 | ~                  | 1                    |
| Cylinder(barrel)         | Check/Cleaning  |               | V                 | ~                  | 1                    |
| Piston, Ring             | Check/Cleaning  |               | ~                 | ~                  | 1                    |
| Muffler & Bolt           | Check/Cleaning  | ~             | ~                 | ~                  | 1                    |
| Bearings                 | Check/Cleaning  |               | V                 | ~                  | 1                    |
| Crank Shaft              | Check/Alignment |               |                   | ~                  | 1                    |

# 2) SPECIFICATIONS AND TECHNICAL DATA

| Items                       | Unit             | G240RC                   | G270RC     | Remarks |
|-----------------------------|------------------|--------------------------|------------|---------|
| Bore x Stroke               | mm               | 32 x 28                  | 34 x 28    |         |
| Displacement                | cm <sup>3</sup>  | 22.5                     | 25.4       |         |
| Effective Compression Ratio |                  | 8.9                      | 8.9        |         |
| Cambunatan                  | Туре             | Walbro WT                | ←          |         |
| Carburetor                  | Venture(mm)      | ø12.7                    | <b>←</b>   |         |
| Starting                    |                  | Recoil Starter           | <b>←</b>   |         |
| lauritia a                  | Туре             | TCI                      | ←          |         |
| Ignition                    | Timing           | BTC 30°/8000rpm          | ←          |         |
|                             | Standard         | CMR7H                    | <b>←</b>   | NGK     |
| Spark Plug                  | Option(For Race) | CR8HIX with Terminal Nut | <b>←</b>   | 1       |
|                             | Option(Hot Type) | CMR6H                    | ←          | 1       |
| Clutch Engagement Speed     | rpm              | 6000                     | <b>←</b>   |         |
| No load max Speed           | rpm              | 19500                    | <b>←</b>   |         |
| Idling Speed                | rpm              | 4000                     | <b>←</b>   |         |
| Max. Power                  | kW/rpm           | 1.77/12000               | 1.80/12000 |         |
| Max. Torque                 | N.m/rpm          | 1.56/9000                | 1.61/9000  |         |
| Fuel Consumption            | g/kW·h           | 616                      | 653        |         |
| Carburetor                  | Н                | 1 1/8 ± 1/4              | ←          |         |
| Standard setting            | L                | 1 1/4 ± 1/4              | <b>←</b>   |         |

# 3) MAINTENANCE SPECIFICATIONS

|                                      |   | G24       | 0RC                          | G270RC    |                              |                               |   |
|--------------------------------------|---|-----------|------------------------------|-----------|------------------------------|-------------------------------|---|
|                                      | Items   | Standard  | Limit                        | Standard  | Limit                        | Measuring Device              | Remarks   |
| Cylinder                             | Bore (mm)   | ø32       | Plating damaged              | ø34       | Plating damaged              | Eye Checking                  |   |
|                                      | Diameter (mm)                                       | ø31.97    | ø31.87                       | ø33.97    | ø33.87                       | Micro Meter                   | At the skirt end and<br>the right angle to<br>the piston pin. |
|                                      | Piston Ring<br>Groove width (mm)                    | 0.81      | 0.91                         | 1.01      | 1.11                         | Thickness Gauge               |   |
| <b>5</b>                             | Piston Pin Hole (mm)                                | ø8.01     | ø8.05                        | ø8.01     | ø8.05                        | Cylinder Gauge                |   |
| Piston                               | Clearance between<br>Piston and<br>Cylinder (mm)    | 0.03~0.06 | 0.15                         | 0.03~0.06 | 0.15                         | Micro Meter<br>Cylinder Gauge |   |
|                                      | Clearance between<br>Groove and<br>Piston Ring (mm) | 0.02~0.04 | 0.1                          | 0.02~0.04 | 0.1                          | Thickness Gauge               |   |
| Piston                               | End Gap (mm)  | 0.05~0.25 | 0.5                          | 0.05~0.25 | 0.5                          | Thickness Gauge               | When inserted in a new cylinder.                              |
| Ring                                 | Width (mm)  | 0.78      | 0.73                         | 0.98      | 0.93                         | Micro Meter                   |   |
| Pisto                                | n Pin Diameter (mm)                                 | ø8        | ø7.98                        | ø8        | ø7.98                        | Micro Meter                   |   |
| Conne                                | Connecting Rod Small end (mm)                       |           | ø11.05                       | ø11       | ø11.05                       | Cylinder Gauge                |   |
| Crankshaft Dia. at Main Bearing (mm) |   | ø12       | ø11.98                       | ø12       | ø11.98                       | Micro Meter                   |   |
| Eccentricity (mm)                    |   | _         | 0.07                         | _         | 0.07                         | Dial Gauge                    |   |
|                                      | Axial Play (mm)                                     | _         | 0.5                          | _         | 0.5                          | Thickness Gauge               |   |
|                                      | Main Bearing  | _         | Gritty or<br>Feels Flat Spot | _         | Gritty or<br>Feels Flat Spot | _                             |   |

#### 4) CARBURETOR

| Items                                 | Standard | Limit  | Measuring Device | Remarks |
|---------------------------------------|----------|--------|------------------|---------|
| Metering Lever set (mm)               | 1.65     | ± 0.16 | Vanier           |         |
| Inlet Valve Opening Pressure (kg/cm²) | 1.3~2.3  |        | Leak Tester      |         |
| Inlet Valve Closing Pressure (kg/cm²) | 0.7~1.7  |        | Leak Tester      |         |

# 5) IGNITION SYSTEM

|                    | Items   |      | Limit                   | Measuring Device | Remarks  |                 |  |
|--------------------|---|------|-------------------------|------------------|--|-----------------|--|
| Spark Plu          | Spark Plug Air Gap (mm) Ignition Coil/Flywheel Air Gap (mm) |      | Spark Plug Air Gap (mm) |                  | 0.7  | Thickness Gauge |  |
| Ignition Coil/Fly  |   |      | 0.4                     | Thickness Gauge  |  |                 |  |
| Coil<br>Resistance | Primary   | 0.7  | _                       | Volt Meter       | Reading between primary terminal and iron core.  |                 |  |
| (Ω)                | Secondary   | 6100 | _                       | Volt Meter       | Reading between sparking cord end and iron core. |                 |  |

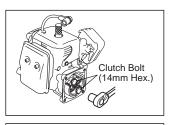
# 6) TIGHTENING TORQUE

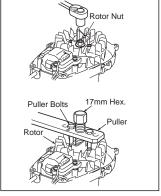
| Items         | Screw Size  | Standard (N·m) | Limit (N·m) | Remarks             |
|---------------|-------------|----------------|-------------|---------------------|
| Carburetor    | M5 (P=0.8)  | 3.4            | 2.9~3.9     |                     |
| Insulator     | M5 (P=0.8)  | 4.4            | 3.9~4.9     | with Locktight glue |
| Clutch        | M6 (P=1.0)  | 6.4            | 4.9~7.8     |                     |
| Rotor         | M8 (P=1.0)  | 12.7           | 9.8~14.7    |                     |
| Cylinder      | M5 (P=0.8)  | 6.8            | 4.7~8.8     |                     |
| Crankcase     | M5 (P=0.8)  | 6.4            | 4.9~7.8     |                     |
| Spark Plug    | M10 (P=1.0) | 10.8           | 8.8~12.8    |                     |
| Muffler       | M5 (P=0.8)  | 8.8            | 6.9~9.8     |                     |
| Fan Cover     | M5 (P=0.8)  | 3.4            | 2.9~3.9     |                     |
| Ignition Coil | M4 (P=0.7)  | 3.2            | 2.5~3.9     |                     |
| Starter Case  | M4 (P=0.7)  | 1.3            | 1.0~1.5     |                     |
| Tapping Screw | TP 4.3      | 2.4            | 1.9~2.9     |                     |

# **SPECIAL TOOLS**

|   | Part Name        | Part No.   | External Appearance | Usage  |
|---|------------------|------------|---------------------|--|
| 1 | Puller Assy      | 2890-96100 | 20                  | To remove rotor.   |
| 2 | Piston Stopper   | 4810-96220 |                     | To hold crankshaft when disassembling/assembling clutch and rotor. |
| 3 | Rod Assy         | 1101-96220 | (2) Table (1)       | To remove/install piston pin.                                      |
| 4 | Air Gap Gauge    | 3330-97310 |                     | To set ignition coil.  |
| 5 | Hex Wrench       | 3304-97611 |                     | For socket screw of Hex.<br>3mm, 4mm and 5mm.                      |
| 6 | Snap Ring Pliers | 5500-96110 | B                   | To remove snap ring.   |

#### **SERVICE GUIDE**





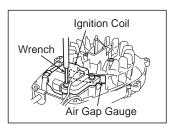
#### 1) REMOVING CLUTCH SHOE

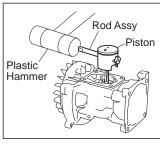
- 1. Remove the housing and plug cap.
- 2. Remove the spark plug and fit the stopper(4810-96220) into the plug hole.
- 3. Remove clutch bolts(14mm Hex.).

#### 2) REMOVING ROTOR (FAN)

- 4. Remove the rotor nut(12mm Hex.).
- Remove the rotor using the puller assy (2890-96100).Apply 8mm puller bolts.

#### **SERVICE GUIDE**





#### 3) ASSEMBLING ROTOR

Insert the gauge(3330-97310) in between the rotor magnet metal and the coil. Tighten screws while pressing the coil against the rotor.

#### Air Gap 0.3 ~ 0.4mm

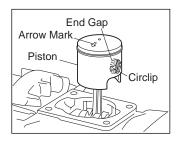
#### 4) REMOVING PISTON PIN

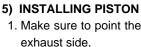
- 1. Remove snap rings from both sides of the piston pin.
- 2. Engage the rod assy(1101-96220) to the piston pin and gently tap with a plastic hammer to push out the pin while holding piston firmly.



Hard hammering may damage the big end of the connecting rod.

#### SERVICE GUIDE





1. Make sure to point the arrow mark on the piston to the

2. Fit the circlip in the groove so as to face the end gap below.



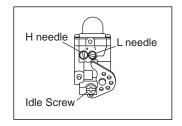
Deformed circlip may come off during engine operation and damage the engine.

#### 6) CARBURETOR ADJUSTMENT

The carburetor comes with a standard setting, it is for optimum performance under the barometric pressure and climatic conditions at factory, so it may be re-adjusted according to load applied.

Idle rpm:  $4000 \pm 300 \text{ rpm (STD Spring)}$ 

H needle: 1 1/8 + 1/4 L needle: 1 1/4 ± 1/4



# **TROUBLE SHOOTING**

# 1) ENGINE DOES NOT START

| Description             | Cause  | Countermeasure                   |
|-------------------------|--|----------------------------------|
| No spark in the spark p | lug  |                                  |
| Spark Plug              | Wet spark plug electrodes                          | Make them dry                    |
|                         | 2. Carbon deposited on the electrodes              | Cleaning                         |
|                         | 3. Insulation failure by insulator damage          | Exchange                         |
|                         | 4. Inproper spark gap                              | Adjust to 0.6~0.7mm              |
|                         | 5. Burn out of electrodes                          | Exchange                         |
| Magneto                 | Ignition coil inside failure                       | Exchange                         |
|                         | Damaged cable sheath or disconnected cable         | Exchange or repair               |
| Switch                  | 1. Switch is OFF                                   | ON the switch                    |
|                         | 2. Switch failure                                  | Exchange                         |
|                         | 3.Primary wiring earthed                           | Repair                           |
| parks appear in the sp  | park plug  |                                  |
| Compression &           | Over sucking of fuel                               | Drain excess fuel                |
| fueling is normal       | 2. Too rich fuel                                   | Adjust carburetor                |
|                         | 3. Overflow  | Carburetor adjust or exchange    |
|                         | 4. Clogging of air cleaner                         | Wash with mixed gasoline         |
|                         | 5. Faulty fuel                                     | Change with proper fuel          |
| Fueling normal but      | Worn out cylinder, piston, or piston ring          | Exchange                         |
| poor compression        | 2. Gas leakage from cylinder and crank case gasket | Apply liquid gasket and reassemb |
| No fuel supply          | Choked breather air hole                           | Cleaning                         |
|                         | 2. Clogged carburetor                              | Cleaning                         |
|                         | 3. Clogged fuel filter                             | Exchange fuel filter             |

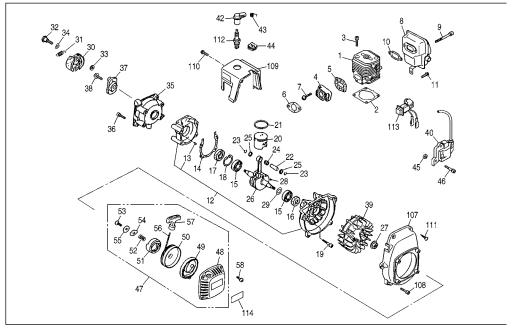
# **TROUBLE SHOOTING**

# 2) LACK OF POWER OR UNSTABLE RUNNING

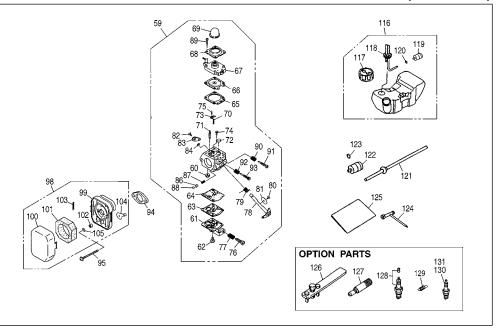
| Description           | Cause  | Countermeasure                     |
|-----------------------|--|------------------------------------|
| Compression is normal | Air penetration from fuel pipe joints, etc                 | Secure connection                  |
| and no misfire        | Air penetration from intake tube joint or carburetor joint | Change gasket or tightening screws |
|                       | 3. Water in fuel   | Change with good fuel              |
|                       | 4. Piston start to seizure                                 | Replace piston(and cylinder)       |
|                       | 5. Muffler choked with carbon                              | Cleaning                           |
| Overheating           | 1. Fuel too lean   | Adjust carburetor                  |
|                       | 2. Clogging of cylinder fin with dust                      | Cleaning                           |
|                       | 3. Poor fuel quality                                       | Exchange with proper fuel          |
|                       | 4. Carbon deposited in the combustion chamber              | Cleaning                           |
|                       | 5. Spark plug electrode red hot                            | Thoroughly clean, adjust spark gap |
|                       |  | [ 0.6~0.7(0.023~0.028in) ]         |
| Others                | 1. Dirty air cleaner                                       | Wash with mixed gasoline           |
|                       | 2. Over loading  | Reduce load                        |

# **PARTS LIST**

# PARTS LIST G240RC (X374323111)



# G240RC (X374323111)



# PARTS LIST G240RC (X374323111)

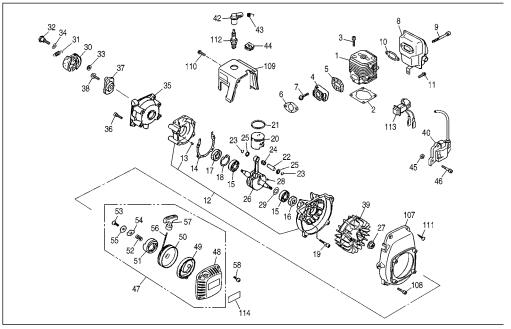
| KEY# | PART NUMBER | DESCRIPTION         | Q'TY/<br>UNIT | REMARKS | KEY# | PART NUMBER | DESCRIPTION                        | Q'TY/<br>UNIT | REMARKS |
|------|-------------|---------------------|---------------|---------|------|-------------|------------------------------------|---------------|---------|
| 1 1  | 848ER812A0  | CYLINDER            | 1             |         | 35   | 1140-21162  | CASE, CLUTCH                       | 1 1           |         |
| 2    | T2075-13120 | GASKET              | l 1           |         | 36   | 3350-15250  |                                    | 4             | M5x16L  |
| 3    | 3310-12281  | BOLT                | 4             | M5x20L  | 37   | 1140-55310  | PLATE                              | 1 1           |         |
| 4    | 1148-13162  | INSULATOR           | 1             |         | 38   | 0224-30614  | BOLT                               | 1             | M6x14L  |
| 5    | 848ER814B0  | GASKET, INSU        | 1             |         | 39   | T2070-71110 | ROTOR                              | 1 1           |         |
| 6    | T2075-14120 | GASKET, CARB        | 1             |         | 40   | T2070-71200 | COIL-A                             | 1 1           |         |
| 7    | 3310-12281  | BOLT                | 2             | M5x20L  |      |             |                                    |               |         |
| 8    | T2070-15110 | MUFFLER             | 1             |         | 42   | T2075-72210 | CAP                                | 1 1           |         |
| 9    | 01252-30550 | BOLT                | 2             | M5x50L  | 43   | 1400-72121  | SPRING                             | 1             |         |
| 10   | 1140-13141  | GASKET, MUFFLER     | 1             |         | 44   | 5500-72130  | GROMMET                            | 1             |         |
| 11   | 1850-32160  | SCREW               | 1             | M4x12L  | 45   | 1260-71261  | SPACER                             | 2             |         |
| 12   | 848ER82110  | CRANKCASE-C         | 1             |         | 46   | 3350-14150  |                                    | 2             | M4x20L  |
| 13   | 2629-21130  | • PIN               | 3             |         | 47   | T2070-75101 | RECOIL-A                           | 1             |         |
| 14   | 5500-21141  | GASKET, CASE        | 1             |         | 48   | T2070-75110 | • CASE                             | 1             |         |
| 15   | 1155-21240  | BEARING             | 2             |         | 49   | 5990-75120  | <ul> <li>SPRING, SPIRAL</li> </ul> | 1             |         |
| 16   | 2169-21210  | SEAL                | 1             |         | 50   | 5990-75131  | • REEL                             | 1             |         |
| 17   | 06034-06001 | BEARING             | 1             |         | 51   | 5990-75141  |                                    | 1             |         |
| 18   | 04065-02812 | RING                | 1             |         | 52   | 5990-75151  |                                    | 1             |         |
| 19   | 01252-30530 |                     | 4             | M5x30L  | 53   | 5990-75270  |                                    | 1             |         |
| 20   | T2071-41110 | PISTON              | 1             |         | 54   | 5990-75160  |                                    | 1             |         |
| 21   | T2071-41210 | RING                | 1             |         | 55   | 5990-75170  |                                    | 1             |         |
| 22   | 1101-41310  | PIN                 | 1             |         | 56   | 1861-75180  | • ROPE                             | 1             |         |
| 23   | 1260-41320  | RING                | 2             |         | 57   | 1490-75181  | • KNOB                             | 1             |         |
| 24   | 5500-41410  | BEARING             | 1             |         | 58   | 0263-90416  |                                    | 4             | M4x16L  |
| 25   | 1101-41340  | WASHER              | 2             |         | 59   | 848ETZ8101  |                                    | 1             | WT-813A |
| 26   | T2070-42001 | CRANKSHAFT-C        | 1             |         | 60   | 3306-81380  |                                    | 1             |         |
| 27   | 1650-43230  | NUT                 | 1             | M8x1.0  | 61   | 3080-81120  | COVER                              | 1             |         |
| 28   | 1000-43240  | KEY                 | 1             |         | 62   | 3310-81130  |                                    | 1             |         |
| 29   | 1140-43250  | SIM                 | 1             |         | 63   | 3304-81140  |                                    | 1             |         |
| 30   | 1140-51111  | SHOE                | 2             |         | 64   | 1172-81150  | DIAPHRAGM                          | 1             |         |
| 31   | T2070-51220 | SPRING (6000rpm IN) | 1             |         | 65   | 1751-81470  | GASKET                             | 1             |         |
| 32   | 1140-51250  | SCREW `             | 2             | M6x22L  | 66   | 3310-81260  | DIAPHRAGM                          | 1             |         |
| 33   | 1140-51230  | WASHER              | 2             |         | 67   | T2070-81210 | BODY-A                             | 1             |         |
| 34   | 1140-51242  | WASHER              | 2             |         | 68   | 1751-81520  | • COVER                            | 1             |         |

# G240RC (X374323111)

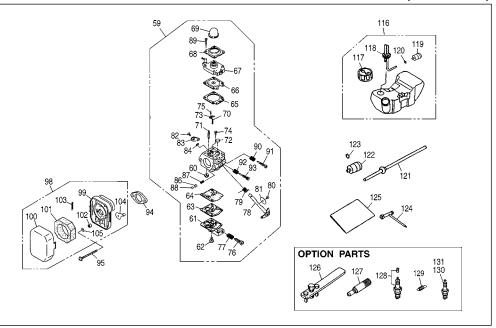
| KEY#     | PART NUMBER              | DESCRIPTION                 | Q'TY/<br>UNIT | REMARKS  |
|----------|--------------------------|-----------------------------|---------------|----------|
| 69       | 1751-81510               | • PUMP                      | 1             |          |
| 70       | 2867-81270               | SPRING                      | 1             |          |
| 71       | 3356-81310               | VALVE inlet                 | 1             |          |
| 72       | 1480-81420               | PLUG welch                  | 1             |          |
| 73       | 3310-81230               | • LEVER                     | 1             |          |
| 74<br>75 | 3310-81240<br>3310-81250 | • SCREW<br>• PIN            | 1             |          |
| 76       | 2630-81330               | • SCREW                     |               |          |
| 77       | 3350-81380               | • SPRING                    |               |          |
| 78       | 848ETZ81T1               | • SHAFT throttle            | 1             |          |
| 79       | 2670-81410               | • SPRING                    | 1             |          |
| 80       | 2880-81470               | • SCREW                     | 2             |          |
| 81       | 3310-81340               | VALVE throttle              | 2             |          |
| 82       | 3310-81360               | • SCREW                     | Ιi            |          |
| 83       | 1790-81440               | LEVER throttle              | 1             |          |
| 84       | 1148-81390               | • RING                      | 1             |          |
|          |                          |                             |               |          |
| 86       | 2812-81510               | PISTON                      | 1             |          |
| 87       | 2810-81530               | SPRING                      | 1             |          |
| 88       | 2812-81520               | • BALL                      | 1             |          |
| 89       | 1148-81530               | • SCREW                     | 4             |          |
| 90       | 1491-81160               | • SPRING                    | 1             |          |
| 91<br>92 | 1148-81171<br>3080-81320 | NEEDLE low speed     SPRING | 1             |          |
| 93       | T2070-81330              | NEEDLE high speed           | Ιί            |          |
| 94       | T2070-81550              | SPACER                      | Ιί            |          |
| 95       | 0263-90560               | SCREW                       | 2             | M5x60L   |
| 33       | 0200 00000               |                             | ~             | INIOXOUL |
| 98       | 848ER88300               | CLEANER-A                   | 1             |          |
| 99       | T1000-82110              | HOUSING                     | 1             |          |
| 100      | 5730-82040               | COVER                       | 1             |          |
| 101      | 1751-82020               | • FILTER                    | 1             |          |
| 102      | 5730-82060               | SLEEVE                      | 2             |          |
| 103      | 848EP183Y0               | • CLIP                      | 1             |          |

|  | ==:0::0 (2:0::0=0:::1)   |   |   |  |  |  |  |  |
|--|--|---|---|--|--|--|--|--|
| KEY#   | PART NUMBER  | DESCRIPTION   | Q'TY/<br>UNIT   | REMARKS  |  |  |  |  |
| 104<br>105   | 848ER883C0<br>1918-82160   | • VALVE<br>• WASHER   | 1   |  |  |  |  |  |
| 107<br>108<br>109<br>110<br>111<br>112<br>113<br>114 | 1900-31410<br>3699-91867   | SCREW<br>SPARKPLUG NGK CMR7H  | 1<br>4<br>1<br>1<br>2<br>1<br>1   | M5x20L<br>M4x12L<br>TP4.5x18L  |  |  |  |  |
| 116<br>117<br>118<br>119<br>120<br>121<br>122<br>123 |  |   | 1<br>1<br>1<br>1<br>1<br>1  | OP<br>OP<br>OP<br>OP<br>OP   |  |  |  |  |
| 124<br>125<br>126<br>127<br>128                      | T3039-91310<br>T2070-93112<br>2890-96100<br>4810-96220<br>848ETZ7110   | SOCKET<br>MANUAL<br>PULLER-A<br>STOPPER<br>SPARKPLUG<br>NGK CR8HIX with Terminal Nut  | 1<br>1<br>1<br>1  | OP<br>OP<br>OP   |  |  |  |  |
| 129<br>130<br>131                                    | 1764-51220<br>3699-91975<br>3699-91809   | SPRING (5000rpm IN)<br>SPARKPLUG NGK CMR6H<br>SPARKPLUG Champion RZ7C   | 1<br>1<br>1   | OP<br>OP<br>OP   |  |  |  |  |
|  | 104<br>105<br>107<br>108<br>109<br>110<br>111<br>112<br>113<br>114<br>116<br>117<br>118<br>119<br>120<br>121<br>122<br>123<br>124<br>125<br>127<br>128 | 104 848ER883C0<br>105 1918-82160<br>107 72070-31111<br>108 3310-12281<br>109 848ER83111<br>110 1850-32160<br>111 1900-31410<br>112 3699-91867<br>113 72070-72200<br>114 848ER890C0<br>116 1726-85004<br>117 5601-85201<br>118 1726-85601<br>119 5500-85400<br>120 1260-85460<br>121 1799-85400<br>122 5500-85400<br>123 1260-85460<br>124 173039-91310<br>125 72070-93112<br>126 2890-96100<br>127 4810-96220<br>128 848ETZ7110<br>129 1764-51220<br>130 3699-91975 | 104 848ER883C0 • VALVE • WASHER  107 T2070-31111 COVER, FAN BOLT COVER-A SCREW SPARRPLUG NGK CMR7H  110 1850-32160 SCREW SPARRPLUG NGK CMR7H  111 1900-31410 SCREW SPARRPLUG NGK CMR7H  112 3699-91975 SPARKPLUG NGK CMR7H  113 T2070-72200 LABEL, RECOIL  116 1726-85004 TANK-A • CAP-A PARPARPLUG NGK CMR7H  117 5601-85201 TANK-A • PIPE COMP  118 1726-85601 • PIPE COMP  119 5500-85400 • FILTER CLIP  121 1799-85400 FILTER CLIP  125 T2070-93112 MANUAL  126 2890-96100 PULLER-A STOPPER  127 4810-96220 SPARKPLUG NGK CMR6H | 104   848ER883C0   105   1918-82160   107   12970-31111   108   3310-12281   109   848ER83111   109   848ER83111   109   110   1850-32160   111   1900-31410   122   3699-91867   133   1200-85400   144   848ER890C0   148   848ER890C0   148   1726-85004   118   1726-85004   1726-85001   118   1726-85001   118   1726-85001   118   1726-85001   119   1200-85400   120   1260-85400   121   1799-85400   122   1260-85400   122   1260-85400   125   125   12070-93112   1260-85400   125   12070-93112   1260-85400   125   12070-93112   1260-85400   127   4810-96220   128   848ETZ7110   129   1764-51220   130   3699-91975   5PARKPLUG NGK CMR6H   1 |  |  |  |  |

# PARTS LIST G270RC (X374326111)



# G270RC (X374326111)



# **PARTS LIST G270RC (X374326111)**

| KEY# | PART NUMBER | DESCRIPTION         | Q'TY/<br>UNIT | REMARKS | KEY# | PART NUMBER | DESCRIPTION    | Q'TY/<br>UNIT | REMARKS |
|------|-------------|---------------------|---------------|---------|------|-------------|----------------|---------------|---------|
| 1    | 848ET812A0  | CYLINDER            | 1             |         | 35   | 1140-21162  | CASE, CLUTCH   | 1 1           |         |
| 2    | T2075-13120 | GASKET              | 1             |         | 36   | 3350-15250  | BOLT           | 4             | M5x16L  |
| 3    | 3310-12281  | BOLT                | 4             | M5x20L  | 37   | 1140-55310  | PLATE          | 1             |         |
| 4    | 1148-13162  | INSULATOR           | 1             |         | 38   | 0224-30614  |                | 1             | M6x14L  |
| 5    | 848ER814B0  | GASKET, INSU        | 1             |         | 39   | T2070-71110 | ROTOR          | 1             |         |
| 6    | T2075-14120 | GASKET, CARB        | 1             |         | 40   | T2070-71200 | COIL-A         | 1             |         |
| 7    | 3310-12281  | BOLT                | 2             | M5x20L  |      |             |                |               |         |
| 8    | T2070-15110 | MUFFLER             | 1             |         | 42   | T2075-72210 | CAP            | 1             |         |
| 9    | 01252-30550 | BOLT                | 2             | M5x50L  | 43   | 1400-72121  | SPRING         | 1             |         |
| 10   | 1140-13141  |                     | 1             |         | 44   | 5500-72130  |                | 1             |         |
| 11   | 1850-32160  | SCREW               | 1             | M4x12L  | 45   | 1260-71261  | SPACER         | 2             |         |
| 12   | 848ER82110  |                     | 1             |         | 46   | 3350-14150  |                | 2             | M4x20L  |
| 13   | 2629-21130  |                     | 3             |         | 47   | T2070-75101 |                | 1             |         |
| 14   | 5500-21141  |                     | 1             |         | 48   | T2070-75110 |                | 1             |         |
| 15   | 1155-21240  | BEARING             | 2             |         | 49   | 5990-75120  | SPRING, SPIRAL | 1             |         |
| 16   | 2169-21210  | SEAL                | 1             |         | 50   | 5990-75131  | • REEL         | 1             |         |
| 17   | 06034-06001 |                     | 1             |         | 51   | 5990-75141  |                | 1             |         |
| 18   | 04065-02812 |                     | 1             |         | 52   | 5990-75151  | SPRING, BREAK  | 1             |         |
| 19   | 01252-30530 |                     | 4             | M5x30L  | 53   | 5990-75270  |                | 1             |         |
| 20   | T2088-41110 |                     | 1             |         | 54   | 5990-75160  |                | 1             |         |
| 21   | T2088-41210 | RING                | 1             |         | 55   | 5990-75170  |                | 1             |         |
| 22   | 1600-41310  | PIN                 | 1             |         | 56   | 1861-75180  | • ROPE         | 1             |         |
| 23   | 1260-41320  | RING                | 2             |         | 57   | 1490-75181  | • KNOB         | 1             |         |
| 24   | 5500-41410  |                     | 1             |         | 58   | 0263-90416  |                | 4             | M4x16L  |
| 25   | _1101-41340 |                     | 2             |         | 59   | 848ETZ8101  |                | 1             | WT-813A |
| 26   | T2070-42001 |                     | 1             |         | 60   | 3306-81380  |                | 1             |         |
| 27   | 1650-43230  | NUT                 | 1             | M8x1.0  | 61   | 3080-81120  | COVER          | 1             |         |
| 28   | 1000-43240  | KEY                 | 1             |         | 62   | 3310-81130  |                | 1             |         |
| 29   | 1140-43250  | SIM                 | 1             |         | 63   | 3304-81140  |                | 1             |         |
| 30   | _1140-51111 |                     | 2             |         | 64   | 1172-81150  |                | 1             |         |
| 31   | T2070-51220 | SPRING (6000rpm IN) | 1             | l l     | 65   | 1751-81470  |                | 1             |         |
| 32   | 1140-51250  | SCREW               | 2             | M6x22L  | 66   | _3310-81260 |                | 1             |         |
| 33   | 1140-51230  | WASHER              | 2             |         | 67   | T2070-81210 | BODY-A         | 1             |         |
| 34   | 1140-51242  | WASHER              | 2             |         | 68   | 1751-81520  | COVER          | 1             |         |

# G270RC (X374326111)

| KEY#     | PART NUMBER              | DESCRIPTION        | Q'TY/<br>UNIT    | REMARKS | H  |
|----------|--------------------------|--------------------|------------------|---------|----|
| 69       | 1751-81510               | • PUMP             | 1                |         | 1  |
| 70       | 2867-81270               | • SPRING           | 1                |         | 1  |
| 71       | 3356-81310               | VALVE inlet        | 1                |         | ١. |
| 72       | 1480-81420               | PLUG welch         | 1 1              |         | 1  |
| 73<br>74 | 3310-81230<br>3310-81240 | • LEVER<br>• SCREW | 1                |         | 1  |
| 75       | 3310-81250               | • PIN              | Ι¦               |         | 1  |
| 76       | 2630-81330               | • SCREW            | Ιί               |         | 1  |
| 77       | 3350-81380               | • SPRING           | Ιί               |         | 1  |
| 78       | 848ETZ81T1               | SHAFT throttle     | Ιi               |         | 1  |
| 79       | 2670-81410               | SPRING             | 1                |         | 1  |
| 80       | 2880-81470               | SCREW              | 2                |         |    |
| 81       | 3310-81340               | VALVE throttle     |                  |         | 1  |
| 82       | 3310-81360               | • SCREW            | 1                |         | 1  |
| 83       | 1790-81440               | LEVER throttle     | 1                |         | 1  |
| 84       | 1148-81390               | • RING             | 1                |         | 1  |
|          | 0040 04540               | DIOTON             | ١.,              |         | 1  |
| 86<br>87 | 2812-81510<br>2810-81530 | PISTON     SPRING  | 1                |         | 1  |
| 88       | 2812-81520               | • BALL             |                  |         | 1  |
| 89       | 1148-81530               | • SCREW            | 4                |         | 1  |
| 90       | 1491-81160               | • SPRING           |                  |         | 1  |
| 91       | 1148-81171               | NEEDLE low speed   | Ιi               |         | 1  |
| 92       | 3080-81320               | • SPRING           | 1<br>1<br>1<br>1 |         | 1  |
| 93       | T2070-81330              | NEEDLE high speed  | l i              |         | 1  |
| 94       | T2070-82510              | SPACER             | 1                |         |    |
| 95       | 0263-90560               | SCREW              | 2                | M5x60L  |    |
|          |                          |                    |                  |         | 1  |
| 98       | 848ER88300               | CLEANER-A          | 1                |         | 1  |
| 99       | T1000-82110              | HOUSING            | 1                |         | 1  |
| 100      | 5730-82040               | • COVER            | 1                |         |    |
| 101      | 1751-82020               | • FILTER           |                  |         |    |
| 102      | 5730-82060<br>848EP183Y0 | • SLEEVE<br>• CLIP | 2                |         |    |
| 103      | 0406710310               | * OLIF             | 1                |         | L  |

| KEY#  | PART NUMBER  | DESCRIPTION  | Q'TY/<br>UNIT   | REMARKS   |
|---|--|--|---|---|
| 104<br>105  | 848ER883C0<br>1918-82160   | • VALVE<br>• WASHER  | 1   |   |
| 107<br>108<br>109<br>110<br>111<br>112<br>113<br>114        | T2070-31111<br>3310-12281<br>T2070-32100<br>1850-32160<br>1900-31410<br>3699-91867<br>T2070-72200<br>T2700-75410   | COVER, FAN<br>BOLT<br>COVER-A<br>SCREW<br>SCREW<br>SPARKPLUG NGK CMR7H<br>SWITCH-A<br>LABEL, RECOIL  | 1<br>4<br>1<br>1<br>2<br>1<br>1   | M5x20L<br>M4x12L<br>TP4.5x18L   |
| 116<br>117<br>118<br>119<br>120<br>121<br>122<br>123<br>124 | 1260-85460   | CLIP   | 1<br>1<br>1<br>1<br>1<br>1  | OP<br>OP<br>OP<br>OP<br>OP  |
| 125<br>126<br>127<br>128                                    | 2890-96100   | PULLER-A   | 1<br>1<br>1<br>1  | OP<br>OP<br>OP  |
| 129<br>130<br>131   | 1764-51220<br>3699-91975<br>3699-91809   | SPRING (5000rpm IN)<br>SPARKPLUGNGK CMR6H<br>SPARKPLUG Champion RZ7C   | 1<br>1<br>1   | OP<br>OP<br>OP  |
|   | 104<br>105<br>107<br>108<br>109<br>110<br>111<br>111<br>1113<br>1114<br>116<br>117<br>118<br>120<br>121<br>122<br>123<br>124<br>125<br>126<br>127<br>128 | 104 848ER883C0<br>105 1918-82160<br>107 72070-31111<br>108 3310-12281<br>109 72070-32100<br>110 1850-32160<br>111 1900-31410<br>112 3699-91867<br>113 72070-72200<br>114 72700-75410<br>116 1726-85001<br>117 5601-85201<br>118 1726-85001<br>119 5500-85400<br>120 1260-85460<br>121 1799-85400<br>122 1799-85400<br>123 1260-85460<br>124 73039-91310<br>125 72070-93112<br>126 2890-96100<br>127 4810-96220<br>128 848ETZ7110 | 104 848ER883C0 • VALVE 105 1918-82160 • WASHER  107 T2070-31111 COVER, FAN 108 3310-12281 BOLT 109 T2070-32100 COVER-A 110 1850-32160 SCREW 111 1900-31410 SCREW 112 3699-91867 SPARKPLUG NGK CMR7H 113 T2070-72200 SWITCH-A 114 T2700-75410 LABEL, RECOIL 116 1726-85004 TANK-A 117 5601-85201 • CAP-A 118 1726-85001 • PIPE COMP 119 5500-85400 • FILTER 120 1260-85460 CLIP 121 1799-85400 PIPE COMP 122 5500-85400 FILTER 123 1260-85400 CLIP 124 T3039-91310 SOCKET 125 T2070-93112 MANUAL 126 2890-96100 SPARKPLUG NGK CMR6H 127 4810-96220 STOPPER 128 848ETZ7110 SPARKPLUG 129 1764-51220 SPARKPLUG 130 3699-91975 SPARKPLUGNGK CMR6H | 104   848ER883C0   • VALVE   1   1   105   1918-82160   • WASHER   1   107   T2070-31111   COVER, FAN   1   108   3310-12281   BOLT   4   110   1850-32160   SCREW   1   111   1900-31410   SCREW   1   113   T2070-72200   SWITCH-A   1   137   T2070-72410   LABEL, RECOIL   1   116   1726-85001   LABEL, RECOIL   1   117   5601-85201   • CAP-A   1   118   1726-85601   • PIPE COMP   1   119   5500-85400   • FILTER   1   121   1799-85400   • FILTER   1   122   1260-85460   • CLIP   1   122   1260-85460   FILTER   1   125   12070-93112   MANUAL   1   126   2890-96100   SPARKPLUG   SPARKPLUG   SPARKPLUG   1   129   1764-51220   SPARKPLUG   SPARKPLUG   SPARKPLUG   1   1   129   1764-51220   SPARKPLUGNGK CMR6H   1   1   1   10   10   10   10   10 |

#### **WARRANTY TERMS**

#### 1) Scope of Application

This engine manufactured by Husqvarna Zenoah Co., Ltd. (herein after "Zenoah"). And sold to the user directly or through distributor/manufacturer, shall entitle to be covered by this warranty.

#### 2) Limits of Warranty

Zenoah warrants that;

- 1. The quality disclosed in the specifications.
- 2. The engine which shall be considered defective by Zenoah, caused by material or production fault.

#### 3) Limits of Compensation

- 1. Zenoah compensates such quality, material and production faults by repairing or replacing through distributor/manufacture.
- Zenoah shall not compensate any other accompanied or benefit losses caused to user and distributor/manufacture by such faults and through repairing or replacing.

#### WARRANTY

#### 4) Term of Warranty

Three (3) months after purchased by end- user subject to 12 months from produced month.

#### 5) Exempt from Warranty

Zenoah shall not warrant this engine even if the fault has been caused during the period of terms of Warranty, in case that.

- Any faults, failures caused from neglect of proper operation and maintenance described in OWNER'S MANUAL.
- 2. Any modification not approved by Zenoah.
- 3. Normal abrasion and deterioration.
- 4. Consuming parts.
- 5. Using any parts which have not been certified by Zenoah.
- 6. Add-on or modified use.



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